

5258540



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

D5763-7

Job Sheet 207393



Part No: D5763-7

Job Qty: 10 pcs

Part Name: Pad



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 2/25/20

Job Tracking No:

Created By: Jennifer Renwick

Due Date: 3/6/20

Type: Stock

Description:

Note: URF 2020-525 Was PN: 78634-12 DWG D5763 REV:A IPP REV:A 19.12.19 NEW ISSUE JV VERF:DD

Ship Via:

## Bill of Materials

## Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
100	Waterjet - Flow - 1	10 pcs	3/6/20	3/6/20	0.17	0.33	Waterjet - Flow		de 20/02/20
110	QC 2	10 pcs	3/6/20	3/6/20	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		de 20/02/20
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		
							QC 2 - 66		
							QC 2 - 64		
							QC 2 - 65		

**PRIORITY**



120 QC 8	10 pcs	3/6/20	0.00 0.00	QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 2 - 76	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
				QC 8 - 76	
				QC 8 - 61	
130 Packaging 3-1 - Stock - B4B	10 pcs	3/6/20	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	

DAS  
40  
FEB 26 2020 3:39

MTC



				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
				Packaging 3 - 37 - B4B	
140 QC 21 - SA	10 pcs	3/6/20	0.00 0.00	QC 21 - SA - 21	
				QC 21 - SA - 70	
				QC 21 - SA - 53	
Part Op 100 - 1-Cut as per D5763 DWG. DWG. Rev: <u>A</u> PROG. Rev: <u>A</u> 2-Deburr if necessary Descriptions: 110 - QC2- Inspect parts off machine FAI/FAIB 120 - QC8- Inspect parts - second check 130 - Identify as per dwg & Stock Location: _____ 140 - QC21- Final Inspection - Work Order Release					
<b>Job BOM</b>					
<b>Part / Item</b>	<b>Component Name</b>	<b>Quantity</b>	<b>Operation</b>	<b>Container</b>	
M304S11GA	304/316 0.125 Sheet	.1310 sf (.0131 ea)	100-Waterjet - Flow - 1	3242860	
<b>Job Allocations</b>					
<b>Operation</b>	<b>Component Part</b>	<b>Required</b>	<b>Inventory</b>	<b>Allocated</b>	
100-Waterjet - Flow - 1	M304S11GA	0	145	0	
<b>Part Specifications</b>					
Specifications could not be found.					

Plex 2/25/20 1:02 PM Dart.lajeunesse.marie





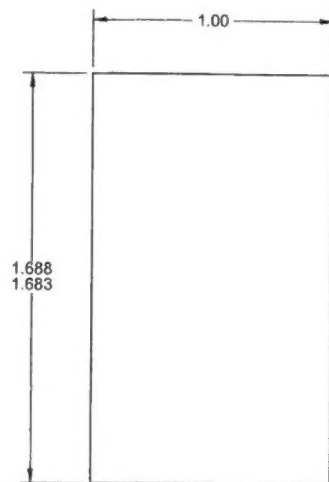
8 7 6 5 4 3 2 1

0.125  
REF

0.125  
REF

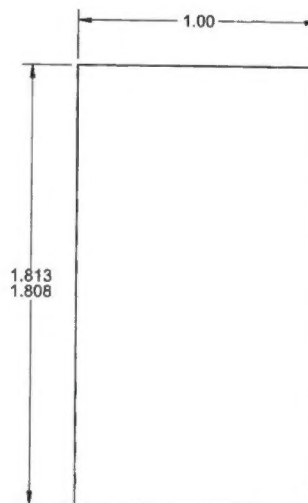
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 207393 MWS  
20-02-25

0.125  
REF



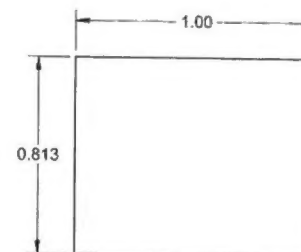
**D5763-5 PAD**

(DERIVED FROM AERO DESIGN P/N 78634-03)



**D5763-7 PAD**

(DERIVED FROM AERO DESIGN P/N 78634-12)



**D5763-9 PAD**

(DERIVED FROM AERO DESIGN P/N 78634-11)

UNDER REVIEW

URF 2020-524 20.02.20 (NO)

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL BAR OR PLATE, 1/8 THICK  
PER ASTM A276 OR ASTM A240 OR MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASME SA240  
REF DART SPEC M304B OR M304S
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: -5: 0.06 lbs  
-7: 0.06 lbs  
-9: 0.03 lbs

**RELEASED**

2020 FEB 19

APPROVED

DESIGN	ZF	<b>DART AEROSPACE LTD</b>	
DRAWN	SAD	HAWKESBURY, ONTARIO, CANADA	
CHECKED	NO	DRAWING NO.	REV. A
MFG. APPR.	DD	<b>D5763</b>	SHEET 6 OF 10
APPROVED	NO	TITLE	SCALE
DE APPR.	CP	<b>FWD BEAM</b>	NTS
DATE	20.02.19	COPYRIGHT © 2019 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER

## POHB045332



**Supplier:** ACI001-VT  
Acier Oue'lte Inc.  
935 Boul u Havre  
Valleyfie  
QC  
J6S 5L 2a 1ada  
Phone :00 567 4248  
Fax: 450 377 5696

**Attention:** Langevin, Melanie

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**PO No:** POHB045332

**PO Date:** 12/6/19

**Due Date:** 12/13/19

**Purchase Order  
Revision:**

**Revision Date:**

**Ship-To Contact:** Lavoie, Chantal  
Phone: 613-623-5200 Ext: 242  
Fax: 613-632-1053  
clavoie@dartaero.com

**Via:** Ground

**Pymt Terms:** Net 60

**Freight Terms:**

**Special Comments:** quote no. sou0227540

DEC 06 2019

### Items

Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		M2024T3S.040			2024-T3 .040 Sheet MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A- 250/4 OR AMS-QQ-A- 250/4 OR AMS 4037 OR ASTM B209	Firmed -		12/13/19	144 sf	0 sf	144 sf	\$6.9811666/sf	\$1,005.29
									144 sf cel			DAS 82 9-89	DEC 11 2019
2		M6061T6S.188			6061-T6 .188 Sheet MATERIAL: 6061- T6/T62 ALUMINUM SHEET AS PER QQ-A- 250/11 OR AMS-QQ-A- 250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed -		12/13/19	48 sf	0 sf	48 sf	\$12.77916650/sf	\$613.40
									48 sf cel			DAS 82 9-89	DEC 19 2019



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# PURCHASE ORDER

## POHB045332



Items													
Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	ccount	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3		M6061T6S.080			6061-T6 .080 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A- 250/11 OR AMS-QQ-A- 250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed		12/13/19	192 sf	0 sf	192 sf	\$6.2664583/sf	\$1,203.16
												DAS 82 9-89  DEC 19 2019	
4		M304S11GA			304/316 0.125 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed -		12/13/19	96 sf	0 sf	96 sf	\$13.329062/sf	\$1,279.59
												DAS 82 9-89  DEC 19 2019	
5		M304S14GA			304SS sheet .080 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf	Firmed -		12/13/19	64 sf	0 sf	64 sf	\$8.366652630/sf	\$535.47
												DAS 82 9-89  DEC 19 2019	





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K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER

## POHB045332



Items													
Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
6		M304S16GA	D3494		304/316 Sheet .063 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed	-	12/13/19	128 sf	0 sf	128 sf	\$6.5061562/sf	\$832.79
128 sf 9-89 DEC 19 2019 DAS 82													
7		M304S18GA			304/316 .050 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed	-	12/13/19	320 sf	0 sf	320 sf	\$5.7099375/sf	\$1,827.18
320 sf 9-89 DEC 19 2019 DAS 82													
Grand Total:													\$7,296.87

### Order Notes

#### Procurement Quality Clauses

A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable). No Raw Metals from China or Soviet Bloc Countries. (DFARS)  
A026 certification of material conformance  
A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program.

A049 supplier awareness.

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 12/6/19 11:14 AM Dart.Lavoie.Chantal





# ACIER OUELLETTE INC.

935, Boul. du Havre  
Salaberry de Valleyfield (Québec) J6S 5L1  
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

## DELIVERY - \*\*MILL TEST\*\*

Copy

CO00183417

### Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

### Shipped to

1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

Att :

Delivery Route 5

### Customer N°

CLI0001056

### Date

2019/12/06

### Delivery date

2019/12/13

### Your order N°

POHB045332

### Processed by

Josianne Bourdon

### Salesman

JOSIANNE BOURDON

### Carrier

OUELLETTE VALLEYFIELD

### Credit Terme

Net 30 Days

Instruction F-M

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
1 ALU SHEET .040 (18G) 2024-T3 4B (4 X 12) DART FEALD-0404122024B 12473 AC32236-SA-11/12 <i>lot 338988B9 heat: 131</i>	81.07	144.00	PI2_\$CLB								
		1.00	UN_\$UN								
2 ALU SHEET 3/16 6061-T6 (4 X 12) FEAL-3164126061 4269 AC32233-TH-11/12 <i>lot 16135/01 H: 01/0091979/8</i>	128.88	48.00	PI2_\$CLB								
		1.00	UN_\$UN								
3 ALU SHEET .081 (12G) 6061-T6 (4 X 12) FEAL-0814126061 3195 TRANSFERT ST-JEROME LE 11-12 PACKAGING <i>lot: 400871 H: H3600021</i>	164.30	144.00	PI2_\$CLB								
		0.00	UN_\$UN								
		1.00	UN								
4 SHEET SS 11G SS304-2B (4 X 8) FESS-11G483042B 3402 PACKAGING <i>Heat: C84X</i>	504.00	96.00	PI2_\$CLB								
		1.00	UN								
5 SHEET SS 14G SS304-2B (4 X 8) FESS-14G483042B 3412 PACKAGING <i>Heat: LZ25HC10</i>	209.98	64.00	PI2_\$CLB								
		1.00	UN								
6 SHEET SS 16G SS304-2B (4 X 8) FESS-16G483042B 3419 PACKAGING <i>Heat: 4167</i>	336.00	128.00	PI2_\$CLB								
		1.00	UN								
7 SHEET SS 18G SS304-2B (4 X 8) FESS-18G483042B 3425 PACKAGING <i>Heat: C44B</i>	672.00	320.00	PI2_\$CLB								
		1.00	UN								

DAS  
82  
9-89  
DEC 20 2019



# Invoice

FC00190611

## ACIER OUELLETTE INC.

935, Boul. du Havre  
Salaberry de Valleyfield (Québec) J6S 5L1  
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

### Sold to

DART AEROSPACE LTD  
  
1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

### Shipped to

1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7  
Att : Facturation

**Customer N°** CLI0001056  
**Date** 2019.12.16  
**Your order N°** POHB045332  
**Salesman** JOSIANNE  
**Carrier** OUELLETTE VALLEYFIELD  
**Credit Term** Net 30 Days  
**Order N°** CO00183417

Product N° and description	Weight	Qty	U/M	Qty	U/M	Price	Pcs Nb	Price	Amount
ALU SHEET .040 (18G) 2024-T3 4B (4 X 12) DART FEALD-0404122024B 12473 3 X 4' X 12' POHB045332 LINE 1 LOT 338988B9 CAST 131 AC32236-SA-11/12	81.07	144.00	PI2_\$CLB	3.00	UN		3.0	335.0967	1 005.29
ALU SHEET 3/16 6061-T6 (4 X 12) FEAL-3164126061 4269 1 X 4' X 12' POHB04532 LINE 2 LOT 16135/01 HEAT 01/0091979/8 AC32233-TH-11/12	128.88	48.00	PI2_\$CLB	1.00	UN		1.0	613.4000	613.40
ALU SHEET .081 (12G) 6061-T6 (4 X 12) FEAL-0814126061 3195 3 X 4' X 12' POHB045332 LINE 3 LOT 400871 HEAT H3600021 TRANSFERT ST-JEROME LE 11-12 PACKAGING	164.30	144.00	PI2_\$CLB	3.00	UN		4.0	228.0925	912.37
SHEET SS 11G SS304-2B (4 X 8) FESS-11G483042B 3402 3 X 4' X 8' POHB045332 LINE 4 HEAT C84X PACKAGING	504.00	96.00	PI2_\$CLB	3.00	UN		3.0	426.5300	1 279.59
SHEET SS 14G SS304-2B (4 X 8) FESS-14G483042B 3412 2 X 4' X 8' POHB045332 LINE 5 HEAT LZ25HC10 PACKAGING	209.98	64.00	PI2_\$CLB	2.00	UN		2.0	267.7300	535.46
SHEET SS 16G SS304-2B (4 X 8) FESS-16G483042B 3419 4 X 4' X 8' POHB045332 LINE 6 HEAT 4167 PACKAGING	336.00	128.00	PI2_\$CLB	4.00	UN		4.0	208.1975	832.79
SHEET SS 18G SS304-2B (4 X 8) FESS-18G483042B 3425	672.00	320.00	PI2_\$CLB	10.00	UN		10.0	182.7180	1 827.18

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9-89  
DEC 20 2019



LINE 4

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304S 11GA  
 DATE: DEC 20 2019

PO / BATCH NO.: POM13045332  
S242860

MATERIAL CERT REC'D: YES  
 QUANTITY RECEIVED: 96 SF  
 QUANTITY INSPECTED: 96 SF  
 QUANTITY REJECTED: —

THICKNESS ORDERED: .125  
 THICKNESS RECEIVED: .125  
 SHEET SIZE ORDERED: 4' x 8'  
 SHEET SIZE RECEIVED: 4' x 8'

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM A240
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	HIT CB4X
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>32</u> <u>3-89</u>	SIGNED OFF BY: _____
DATE: <u>DEC 20 2019</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

LIME 4

M304S11GA

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SHEET  
ANNEALED

SPECIFICATION: MIL-S-5059  
OR AMS 5513 (304)  
OR AMS 5524 (316)  
OR ASTM A240  
OR ASME SA240

DAS  
82  
S-89

DEC 20 2019

FINISH:

FINISH  
UNPOLISHED No. 1  
UNPOLISHED No. 2D  
UNPOLISHED No. 2B  
POLISHED No. 3  
POLISHED No. 4  
BUFFED No. 6  
BUFFED No. 7  
BUFFED No. 8

DART M-NUMBER  
IDENTIFIER  
1P  
2D  
NONE  
3P  
4P  
6P  
7P  
8P

PART NUMBER: M304S TT GA #P  
GA

WHERE "TT" = GAUGE THICKNESS  
WHERE "#P" = FINISH IDENTIFIER

EG. 16 GAUGE SS SHEET 2B FINISH = M304S16GA  
EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

GAUGE THICKNESS REFERENCE:

GAUGE	NOM. THICK. (IN)	THICKNESS RANGE (IN)
26	0.01875	0.0178 - 0.019
25	0.021875	0.0199 - 0.023
24	0.025	0.024 - 0.026
23	0.028125	0.027 - 0.029
22	0.03125	0.030 - 0.032
21	0.034375	0.033 - 0.035
20	0.0375	0.036 - 0.040
19	0.04375	0.041 - 0.046
18	0.050	0.047 - 0.052
17	0.05625	0.053 - 0.058
16	0.0625	0.059 - 0.065
15	0.0703125	0.066 - 0.072
14	0.078125	0.073 - 0.083
13	0.09375	0.084 - 0.098
12	0.109375	0.099 - 0.114
11	0.125	0.115 - 0.130
10	0.140625	0.131 - 0.145
9	0.15625	0.146 - 0.160
8	0.171875	0.161 - 0.176
7	0.1875	0.182 - 0.194
6	0.2031	0.194 - 0.212
5	0.2188	0.201 - 0.228
4	0.2344	0.225 - 0.243
3	0.2500	0.238 - 0.262
2	0.2656	0.254 - 0.278
1	0.2813	0.269 - 0.293
0	0.3125	0.301 - 0.325

RELEASED

2015 FEB 04

ECN 15-122 97

D	ADDED GAUGES D-7	AJS	15.01.06
C	DEFINED FINISH OPTION (ZN C8) AND EXAMPLE OF MATERIAL PIN WITH FINISH OTHER THAN 2B (ZN B5)	MB	12.09.20
B	REFORMAT DWG. ADD ASTM/ASME SPECS (ZN D8-1), ADD GAUGE REF (C8-1), REF PAR 08-020A	CP	09.06.01
A	NEW ISSUE	DS	01.09.24
REV	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS	DRAWING NO.	REV. D
CHECKED		M304S	SHEET 1 OF 1
MFG. APPR.		TITLE	SCALE
APPROVED		304/316 SS SHEET	NTS
DE APPR		COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	
DATE	15.01.06		





North American Stainless Canada Inc.  
740 Imperial Road North  
Guelph, ON N1K1Z3  
Canada

# METALLURGICAL TEST REPORT

6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000

Certificate: 526418 1

Customer: 007050 001

Date: 7/25/2019 Page: 1

Steel: 304/304L

Finish: 2B

Corrosion: ASTM A262/15A;180Bend-OK

Your Order: 70546

NAS Order: WN 0111468 02

## PRODUCT DESCRIPTION:

STAINLESS STEEL COIL, C.R. ANNEALED & PICKLED. UNS 30400/30403  
ASTM A240/18, A480/18a, A566/15; ASME SA240/17, SA480/17, SA666/17  
CHEM ONLY ON FOLLOWING ASTM: A276/17, A479/17, A484/16, A312/16  
CHEM ONLY ON FOLLOWING ASME: SA312/13, SA479/13  
AMS 5511H/5513J XMRK; MIL-5059D AMD3(X CRN MEAS); MIL-4043B  
NACE MR0175/ISO 15156-3:2009 A, MR0103/07; QQS766D-A X MAG PERM  
MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED

## REMARKS:

Mat'l is Free of Mercury Contamination. No weld repairs.  
EN 10204:2004 3.1; RoHS 1 & 2 Compliant  
Material is Free of Radioactive Contamination  
Steel Making Process: EAF, AOD, & Cont. Casting  
Product Mfg. by a Quality Mgt. Sys. in Conf. w/ISO 9001  
\*Melted & Manufactured in the USA; Mat'l is DPA's Compliant

82 DEC 20 2019  
9-89

Product Id	Coil #	Skid #	Thickness	Width	Weight	Length	Mark	Pieces	Commodity Code
05C84X AA	05C84X A		.1200	48.0000	4,442 SHEETS	144.00		19	

## CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

ANAB, ISO/IEC 17025, Certificate# L2323  
Chemical Analysis per ASTM A751/14a

HEAT	CM	C %	CR %	CU %	MN %	MO %	N %	NI %	P %	S %
C84X	US	.0232	18.1450	.4395	1.8185	.3810	.0826	8.0750	.0320	.0033
SI %										
.2745										

## MECHANICAL PROPERTIES

Product Id#	UTS	20C .2% YS	20C ELONG	% Hard	Tail
	KSI	KSI	%-2"	RB	Hard
05C84X AA	F T 93.43	44.50	48.77	85.00	85.50

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical  
Dept. Mgr.

KRTS TARK

sent: C84X

209099

Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

Job: _____  Part No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/>	<b>DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Water Jet <input type="checkbox"/>            Supplier <input type="checkbox"/>            Quality <input type="checkbox"/> </div> </div>			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
<b>Root Cause</b>  <div style="display: flex;"> <div style="flex: 1;">           Operator <input type="checkbox"/>            Manufacturing Process <input type="checkbox"/>            Equip/Tooling <input type="checkbox"/>            Handling/Presservation <input type="checkbox"/>            Material <input type="checkbox"/>            Product Improvement <input type="checkbox"/>            Process Improvement <input type="checkbox"/>            Human Factors <input type="checkbox"/> </div> <div style="flex: 1;"> <input type="checkbox"/> Pressure/Forced  <input type="checkbox"/> Bending  <input type="checkbox"/> Crushing  <input type="checkbox"/> Cracks  <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist  <input type="checkbox"/> Marks/Chatter  <input type="checkbox"/> Mislabeled         </div> </div>		<b>FAULT CATEGORY</b>  <div style="display: flex;"> <div style="flex: 1;"> <input type="checkbox"/> Contamination  <input type="checkbox"/> Misaligned/off center  <input type="checkbox"/> BOM/Route  <input type="checkbox"/> Broken/Damage/Defect  <input type="checkbox"/> Incomplete/Unclear Instructions  <input type="checkbox"/> Drill Holes  <input type="checkbox"/> Fit/Function         </div> <div style="flex: 1;"> <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Folio/Program  <input type="checkbox"/> Grain Direction  <input type="checkbox"/> Weld  <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Out of Sequence  <input type="checkbox"/> Off-set/Set-up         </div> <div style="flex: 1;"> <input type="checkbox"/> Positioned Wrong  <input type="checkbox"/> Outside Tolerance  <input type="checkbox"/> Drawing  <input type="checkbox"/> Finish  <input type="checkbox"/> Part Lost/Missing  <input type="checkbox"/> Misread         </div> </div>			
Other/Details:					